

ABSTRACT

A binarizer binarizes a video signal input from an A/D converter and a video signal output from a line memory using an average luminance value provided from a detection window video signal processor as a threshold value, and outputs a binary pattern. A reference pattern generator generates a plurality of reference patterns. An angle detector compares the binary pattern with each of the plurality of reference patterns, and outputs the angle of a matched reference pattern as angle information. An arc shape detector outputs the edge angle information of a picture based on a combination of the angle information of an interpolation scanning line including an object interpolation pixel and the angle information of interpolation scanning lines above and below the interpolation scanning line.